# Work Zone Safety Task Force Meeting April 21, 2005 Kent Maintenance Facility

### Introductions

Kevin Dayton welcomed the group and had each person introduce him or herself. Officers Kelly Spangler from King County and Pat Percival from Monroe attended the meeting representing the Washington State Patrol (WSP).

Northwest Regional Administrator Lorena Eng expressed her appreciation for the work that the Work Zone Safety Task Force has accomplished. She thanked the attendees for pursuing safety in work zones, especially in light of one fatality and one severe injury recently in Northwest Region. She also talked about the power of the media to make a construction or maintenance work zone less stressful to motorists through advance information.

### Washington State Patrol Involvement in Work Zones

Trooper Kelly Spangler said that the primary job of the WSP is to keep people safe. The WSP appreciates the media interest in work zones and the part the patrol plays. She said the WSP always appreciates knowing which areas WSDOT considers hotspots, trooper assignments are made from this outreach program. WSDOT's Northwest Region feels they are very successful communicating with the WSP and are willing to share their ideas with other regions, contact Phil Fordyce for more information. The officers reiterated the dialogue of the Wenatchee area WSP who asked for the WSP to be considered in the design stage of construction, and to have some considerations such as creating areas during construction that the WSP can use for pulling drivers over.

#### Region Roundtable

Mike O'Neil from Lakeside Industries discussed several topics, including the difficulty in needing to address safety while balancing production schedules and trying to not impede the public. Lakeside prefers weekend and full road closures for paving, it's always more successful with media coverage and public notices. He talked about the danger of getting used to traffic close by, and the newly enacted "near misses" report that Lakeside has. He says his people are confused as to signing standards; they don't seem to have one source of information. He also expressed concern about lump sum jobs especially in mobile projects.

Chuck Ruhsenberger of Southwest Region says not much is happening in the construction arena yet. The region needs to overlay a bridge; they polled the public and asked if they preferred a total closure of four months or a partial closure for 18 months. A surprising 50 % voted for total closure. More data is still being collected. Chuck talked about a regional plan to reduce overruns on large projects. Part of this plan involves staging plans that reduce both impacts to the traveling public and contractor/WSDOT risk. Ken Smith will get him some data that may help. Chuck asked for input from other regions about the most expedient way to move stripes in a work zone, the regions gave Chuck some ideas. He also talked about lump sum traffic control and the efficiencies he's seen, such as reducing the use of flaggers by stacking work activities and reducing the number of days on a job.

Sue Babic of Olympic Region said she keeps a written record of near misses and confrontations. She talked about a recent incident regarding a possibly impaired driver, apparently deliberately knocking cones over in a nighttime work zone. Officer Percival said ideally, 911 should have been called right away so a trooper could be sent to the scene. Frank Newboles, HQ Work Zone Safety and Mobility Manager, commented that this might be a good time to send out a bulletin describing what to do in a work zone when there is a dangerous or confrontational driver. Amy Revis of Olympic Region said that she thinks lump sum traffic control has been successful. Steve Haapala said that he has been getting a lot of requests for the 54-44, Work Zone Traffic Control Guidelines.

Kirk Berg of North Central Region said they are using lump sum construction projects along with some projects having lump sum traffic setup while paying for flaggers and spotters. He feels that although lump sum seems expensive, it seems to be working well. He talked about having a set of traffic control plans that cover just about everything that could happen on a site so the contractors have access to the plans they need. He said that his region feels the variable speed zone signs work well; WSP helping to enforce this is invaluable (troopers made 120+/- stops in five hours in a Moses Lake work zone last year).

Phil Fordyce of Northwest Region talked about having contractors work weekends because businesses and employees are less impacted. Public outreach and one on one contact with businesses has been very successful in keeping drivers less stressed about roadwork. Phil says that utility coordination is still an issue, but it has proven very effective to involve utility entities in contractor meetings. He also talked about pedestrian access in work zones, he feels the MUTCD direction is not enough and perhaps the WZSTF would like to provide more guidance on this issue. In NW Region there is a real push for contractors not to disrupt ITS any more than they have to and to get it up and running first. He discussed the use of portable VMS and other messaging, and the need for the public affairs office and the project engineer to communicate in order for these messages to be current and accurate. Frank Newboles is working on a standard for notifying the public of HAR messages using the VMS system. Bob Lenz, NW Region Safety, would like more media attention for work zone workers. He also would like the safety office notified of "hot zones" so they can be involved, and wants WSP provided with any rerouting information. Bob says he sees great value in sharing near misses at safety meetings.

Rick Gifford of North Central Region will be emphasizing traffic control training, and encourage more thorough knowledge of the MUTCD and the 54-44 in his region. He talked about a specific work zone site on 410 and a one-lane closure. He pointed out RCW 46.37 that explains what types of warning lights can be used on a vehicle. Tom Lenberg stressed his people are committed to safety and reiterated the importance of notifying supervisors of near misses in work zones.

Ralph Robertson of Eastern Region told the group that they use VMS for posting speed limits in work zones with great success. He talked about a project on I90 that had a high rate of accidents, but when WSDOT and WSP agreed to lower the speed limit and increased enforcement patrols in the zone, there was a significant reduction in incidents. Eastern Region is using lump sum contracting on selected projects and so far they are working well.

## **Vehicle Lighting Standards**

The WZSTF will take formal action on this issue and make recommendations for moving ahead with implementation by TEF. Upon implementation, this issue will be considered resolved.

Pat Moylan asked the regions to review the rewritten vehicle lighting standards. Curt Gegoux, TEF Superintendent, talked about their region buying fully equipped dump trucks and deciding how the lighting should be designed. WSDOT Risk Management, WSP and all six regions were involved in creating the lighting standards. WSDOT has the responsibility to make sure all their trucks have the same lighting. The standards divide vehicles into those that will be in work zones and those that will not. Six levels of lighting were created to designate the extent of lighting depending on what job the vehicle is involved in. The intensity of light in work zones was discussed, studies have shown halogen lights can be more effective than strobe but this will be left up to the region depending on the use. The standard, applicable to WSDOT leased and owned vehicles only, does not ask that vehicles be retrofitted, but all vehicles purchased after the standards are approved will need to be fitted according to standards. Mike O'Neil says that he will be interested to see if contractors will be impacted with this ruling. The WSP will also look this policy over. The Standard Specifications Manual will not be affected by this change. The group voted unanimously to pass this recommendation on to TEF.

### **WZSTF** Subcommittees

**Traffic Oversight Committee** – Dave Hamacher, Safety and Health Manager, talked about the Idaho, Oregon, Washington and Montana reciprocity agreement concerning state flagger cards. He also discussed TCS and flagger training, and pointed out that the work zone training videos are outdated and don't reflect updates to the MUTCD. Dave asked for funding ideas, Paul Harker of FHWA will look into it, Mike O'Neil will check with the Paving Association, and others had some ideas as well. Sue Babic's crew has some footage that may be useful.

The Department of Labor and Industries (L&I) has sent a dozen employees to flagger and TCS training so they can properly review work zones. NW Region received a call recently from L&I complimenting a maintenance crew on using proper safety apparel.

Frank Newboles told the WZSTF that WSDOT and L&I had previously met to discuss how work zone compliance would be enforced, they agreed if the MUTCD says "shall" or "standard", that is an enforceable requirement. "Should" and "guidance" statements may be subject to interpretation and possibly enforceable. Frank says WSDOT is still working with L&I on the issue of short duration work zones in regard to flaggers.

**Safety Products Committee** – Marty Weed, State Work Zone Engineer, talked about four products:

• Instalert – a portable message sign that can fold up and be stored in a car trunk, the new MUTCD allows WSP and incident response crews to use this device. WSDOT is not interested in purchasing this product.

- Power Flare electronic flare device the size of a large hockey puck, good for use by incident response for a hazardous spill or a road closure, either rechargeable or battery. WSDOT will approve with limitations.
- Tracer 3000 digital camera DVD system for use on a vehicle. Sue Babic's crew has four cameras on one truck, one in front, two in the back and one on the side the crew is working. There have been no collisions to document, but it has been used to document set up. The camera system is expensive but it will be approved for use.
- Traffic Guard a portable speed bump that weighs about 40 pounds and rolls out. This one has not been tested yet, traditionally these devices have not stayed put and traffic often doesn't recognize what they are so they try to go around them. Marty will report back at the August meeting on its effectiveness.

**Technical Committee** – Frank Newboles talked about the adoption of the MUTCD. There will be no major changes, but there will be several technical changes that affect work zones, and the M54-44 will be updated accordingly. Frank talked briefly about traffic delays in work zones, the work zone safety bulletins (Frank passed a draft out on work zone design strategy and traffic control plan development and asked for comments back), and lessons learned (the work zone web page will highlight this). Traffic control for roundabout construction and maintenance surfaced as a concern. The WZSTF will look at the work zone review process and make recommendations.

## Governor's Industrial and Safety Conference

Mike O'Neil is on a committee for the Governor's Industrial and Safety Conference and feels that work zones need to be seen as a separate entity from construction. He feels this topic should be a mini seminar at the next conference, and that construction, maintenance and design could all be involved. Mike will pursue this issue.

#### Issue Tracking Form

Kevin Dayton pointed out that the task force talks about a lot of issues and that not all of them require formal endorsement. Those ideas that the task force can make a recommendation on will be put on an Issue Tracking Form. The form will be updated when any action takes place. When the issue is resolved, documentation will be stapled to the tracking form, which will be filed. At this point, the task force is working on six issues, the group was urged to look the forms over and let Vicky know if they have any suggestions.

#### Ticket Taker on Paving Projects

Based on the Construction Manual, Section 10-2.2A, Ralph Robertson is trying two experiments to get ticket takers off the roadway. On one project, the ticket taker will be on site doing a tally of trucks instead of physically receiving the ticket. A modification will be written for the contractor to collect the tickets and the project engineer will check the tickets against the load tally at the end of every day. On a second project, at a night paving job in Spokane, the placed material quantity will be checked against the ticket quantity. Ralph will report back at a future meeting as to the success of these two experiments. Kirk Berg of SC Region would like to try these methods as well if the Construction Manual and FHWA allow it.

## Higher Grade Reflective Paddles

Tom Root had 24 individual stop/slow sign paddles made with a higher-grade reflective sheeting than the current paddles have. These paddles were given out to crews to use, feedback has been that the signs stand out more and that they seem more durable. Sue Babic's crew will do a controlled night review to see if glare could be an issue and report these findings at a future meeting. The group discussed whether an upgrade to the specifications should be made if the paddle appears to be superior. Any changes to the specifications must go through the State Traffic Engineer for approval. Frank pointed out that these paddles can exceed sheeting material requirements without approval; no decision was made at this time.

#### ADIEUM Attenuators

Ken Smith said that contractors have inventories of the ADIEUM Attenuators and the contractors feel that if WSDOT is going to limit the use of these attenuators in construction zones, WSDOT should have a phase out plan. Currently these attenuators are only approved for temporary use. Ken and Kevin Dayton will talk with representatives in the construction industry and give a full update at the next WZSTF meeting.

#### Statewide and Region Work Zone Review Process

John Conrad, Assistant Secretary for Engineering and Regional Operations, asked Kevin to evaluate the work zone review process and the reoccurring issues that appear year after year. The contractors have a traffic control plan that they need to follow; WSDOT inspectors may need to provide more oversight and direction to contractors to ensure compliance. Some regions do their own project reviews and consult with the project engineer; these regions have fewer work zone issues. The project engineers are always invited to attend the review that Frank does of various work zones around the state. Most of the regions said they have taken the list of improvement opportunities Frank provided to their PE meetings where it has been well received.

Marty and Frank created a matrix citing twelve work zone traffic control reoccurring issues and improvement opportunity categories, the issue with each, and solutions and recommendations for dealing with the issues. Frank and Marty are available to attend region PE meetings to discuss the matrix, otherwise each region will take care of the work zone review recommendations as they see fit. A region specific report can be provided upon request.

#### WSP Agreement and Guidance Discussion

Chris Christopher and Kevin Dayton sent a memo to the WSDOT Regional Administrators praising the good working relationship they have with WSP. The memo "encourages region managers to go beyond keeping WSP in the loop and make them part of the process by involving them as we plan and conduct work zone operations."

Agreement GC9131, the use of WSP in work zones, is being updated. Kevin gave a brief history explaining that when the WSP was being paid overtime to patrol work zones, and costs started to escalate, WSDOT began looking at alternatives. One was Puget Sound Executive Services, a business that uses off duty WSP troopers and other law enforcement officers for work such as security at Husky Games and other events. The

rate charged is less than the overtime, and PSES does the scheduling. Other alternate options include WSDOT allotting FTEs for troopers or having dedicated WSP working fulltime for WSDOT. WSDOT is still researching these options.

# ATSSA Convention Update

Frank Newboles attended the ATSSA National Convention, which deals primarily with work zones, traffic control devices and equipment, and traffic safety. Part of the convention is an exposition where manufacturers show the latest equipment – this year new sign stands, portable curb/speed bumps, and a portable GPS signal system stood out as some of the better devices, in Frank's opinion. There were numerous workshops and committee meetings, which included such topics as border crossing traffic control, and work zone ITS elements and how to apply user costs to delay mitigation features in construction projects.

### Work Zone Safety Event

Kevin complimented Lisa Murdock, HQ Communications Office, for the excellent memorial to fallen workers. A dramatic effect was created on the first floor of the HQ WSDOT building with the display of 56 pairs of boots, 56 traffic cones, 56 hard hats with the workers name and date of death, and a single white rose at each. The event included speakers WSDOT Secretary Doug MacDonald and Commissioner Barnes and a color guard of WSP troopers. Lisa has also been working on the "Give 'Em a Brake Program" which this year was aligned with the national work zone emphasis. A NW Region work zone was picked as the site for a WSDOT/WSP coordinated event – five troopers in the work zone stopped numerous drivers and gave them tickets. Television and radio stations documented the event. Southwest Region participated in a work zone awareness event with Oregon's Department of Transportation. Lisa told the group that the workbooks, aimed at creating work zone awareness in young children, are ready to go out to the public. The work zone bracelets have been a big hit. Starting May 6 an intern will be revamping the drivers' education program. In June, 10-second spots promoting work zone safety will be purchased that will run at the end of metro traffic reports.

#### Final Rule on Work Zone Safety and Mobility

Paul Harker, of the Federal Highways Association, noted that the FHWA is becoming more focused on finance and project management and less on project oversight. Implementation guidance on the new rule will be coming out this spring. Paul announced that he will be leaving for Wyoming and a FHWA replacement will be appointed to the task force. Frank talked about key elements within the rule and how they will apply to WSDOT. Program managers will be developing policies and procedure to address this rule. Phil Fordyce asked what the regions can do to get ahead in the matter of compliance; Frank says the regions are doing the majority of the requirements already, but not necessarily in a consistent manner.

#### Next Meeting

The next meeting of the Work Zone Safety Task Force will be held August 9 in either Yakima or Tri Cities. Rick Gifford will work with Vicky Thorniley to get the meeting set up.